Land Use Study 4 (Aesthetics)

Objectives of the Study

Land Use Study 4 will inventory and characterize the existing influence of the project on the aesthetic quality of the project area. It will assess the level of contrast or compatibility of existing project features with the project's aesthetic setting and will evaluate the degree to which proposed enhancement measures would improve (or not improve) the aesthetic quality of the project area. The study will also examine how consistent the aesthetic condition of the project is with the aesthetic elements of relevant comprehensive and/or management plans.

Relationship to Relicensing/Need for Study

FERC requires that applicants assess how a relicensed project will effect the aesthetic quality of the area the project is located.

Study Area

Areas within the Oroville Project FERC boundary.

Methodology and Analysis

Land Use Study 4 will consist of two phases; 1) an existing aesthetics condition inventory, and 2) an evaluation and analysis of potential enhancement measures along with an opportunity and constraints analysis.

Phase 1: Existing Conditions Inventory

Phase 1 will be composed of two tasks: 1) the Pre-field Aesthetic Inventory, and 2) Field Reconnaissance.

Task 1: Pre-Field Aesthetic Inventory.

Task 1 will involve collecting existing data related to aesthetic quality. Comprehensive plans such as the Plumas National Forest's Land and Resource Management Plan and BLM's Redding Resource Management Plan will be consulted to obtain current scenery management data. Data that is available on GIS will be transferred to the project GIS system.

Preliminary Key Observation Points (KOPs) will be proposed after discussions with several work groups and agency staff. The KOPs will be chosen to represent various types of views that occur around the lake. The locations of KOPs that could be considered will likely include campgrounds, boat launching/mooring areas, residences, beaches, bridges, roads, trails and

culturally important areas. Where appropriate, viewshed maps from selected KOPs will be generated using GIS prior to field reconnaissance. In addition, it may be appropriate to perform a GIS visibility analysis for project features such as the dam, transmission lines, recreation areas, etc. prior to the field reconnaissance.

Task 2: Field Reconnaissance.

The field reconnaissance will begin by verifying the appropriateness of the KOPs selected for analysis. KOPs may be added or subtracted, if during field reconnaissance, it is determined that it is necessary to have a more representative sampling of the project area. Views from the selected KOPs will be documented with photographs and videotaping, as will the visibility of project features. The visibility of project and non-project features that influence the visual quality of the project area will be catalogued. Areas of disturbed shoreline (with debris, exposed tree stumps, introduced plant species, heavy erosion, etc) that may negatively impact the visual quality of the project and could potentially be enhanced will be located and catalogued.

Phase 2: Evaluation and Analysis

Phase two will consist of two tasks: 1) an evaluation and analysis of potential enhancement measures and, 2) an opportunities and constraints analysis.

Task 1 Analysis of Aesthetic Issues

Task 1 will begin with an analysis of how project and non-project features influence the aesthetic quality of the project area and how consistent project and non-project features are with the visual management directives of management plans such as the Forest Service's Scenery Management System. In addition, the potential effects of future developments, plans, and policies on the aesthetic quality of project area will be discussed. Some of the aesthetic issues that were identified by the Land Use Work Group will be evaluated and discussed.

Task 2: Opportunities and Constraints

Task 2 will consider existing conditions that may need addressing along with performing an evaluation of the effectiveness of potential enhancement measures that have been identified from sources including the Land Use Work Group. This task will also examine the opportunities and constraints associated with improving the visual quality of the project. Examples of enhancement measures that might be appropriate could include hydroseeding, removal of debris, screening facilities, and the use of non-reflective metal for parts of some facilities.

Results/Products
The primary product of the Land Use Study 4 will consist of an aesthetic resource report. The report will include an inventory and assessment that will characterize the existing aesthetic and will include:

- Photographs taken from KOPs
- Visibility analysis from selected KOPs (GIS produced maps)
- A visibility analysis of project features (may be partially GIS based)

In addition, the report will discuss enhancement suggestions and evaluate the effectiveness of the suggestions.

Coordination With Other Resource Areas/Studies

Prior to starting Land Use Study 4, other work groups will be contacted to determine where and when relevant data can be gathered and shared by other groups. This study will be coordinated with the teams performing studies for the Recreation, Socioeconomics, Environmental, and Engineering and Operations Work Groups, as well as the Land Management and Land Use studies.

Schedule

Phase 1 would include an analysis of the aesthetic conditions of the project when the reservoir is full and when it is at a low pool elevation. This would involve two trips, one in the spring of 2002 when the pool elevation is high and one in the late summer when the pool elevation is low. The pre-field trip data gathering would occur in early spring of 2002. Phase 2 would occur during the fall of 2002.

Issues, Concerns, Comments Tracking and/or Compliance Requirements

Issue Statement A1 – Concerns the effects of drawdown on visual quality.

Issues addressed:

AE5 – bathtub ring
AE16 – possibility of reseeding perimeter of exposed shoreline

Issue Statement A2 – Concerns the effects of construction debris, garbage and invasive species on appearance of project lands

Issues addressed:

AE1,2,3,4, 5 - debris collection
AE15 – remove invasive, non-native plant species

Issue Statement A3 – Concerns appropriate measures for aesthetic enhancement of project lands

Issues addressed:

AE10 – potential projects that could influence aesthetics of project
AE12 – use native landscaping
AE13 – landscaping a fish hatchery and nearby river area
AE16 – reseed face of Oroville dam and perimeter of shoreline

Issue Statement A4 – Concerns the impacts of future project features on aesthetic quality

Issues addressed:

AE7 – power lines
AE8 – visitor center
AE9 – low impact signs
AE10 - projects that could affect aesthetic quality of project
AE17 – effects of noise